## Roy B Torbert

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1047561/publications.pdf

Version: 2024-02-01

358 papers 17,160 citations

56 h-index 24511 114 g-index

373 all docs 373 docs citations

times ranked

373

4112 citing authors

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Investigation of the homogeneity of energy conversion processes at dipolarization fronts from MMS measurements. Physics of Plasmas, 2022, 29, .  | 0.7 | 5         |
| 2  | Lower hybrid drift wave motion at a dayside magnetopause x-line with energy conversion dominated by a parallel electric field. Physics of Plasmas, 2022, 29, 012905.   | 0.7 | 3         |
| 3  | Theory, observations, and simulations of kinetic entropy in a magnetotail electron diffusion region.<br>Physics of Plasmas, 2022, 29, .  | 0.7 | 7         |
| 4  | A New Three-Dimensional Empirical Reconstruction Model Using a Stochastic Optimization Method. Frontiers in Astronomy and Space Sciences, 2022, 9, .   | 1.1 | 1         |
| 5  | Electron energization and thermal to non-thermal energy partition during earth's magnetotail reconnection. Physics of Plasmas, 2022, 29, .   | 0.7 | 7         |
| 6  | The EDR inflow region of a reconnecting current sheet in the geomagnetic tail. Physics of Plasmas, 2022, 29, .   | 0.7 | 3         |
| 7  | Magnetic Field Annihilation in a Magnetotail Electron Diffusion Region With Electronâ€Scale Magnetic Island. Journal of Geophysical Research: Space Physics, 2022, 127, .  | 0.8 | 6         |
| 8  | Characteristics of Energetic Electrons Near Active Magnetotail Reconnection Sites: Tracers of a Complex Magnetic Topology and Evidence of Localized Acceleration. Geophysical Research Letters, 2021, 48, e2020GL090089. | 1.5 | 10        |
| 9  | Comparative Analysis of the Various Generalized Ohm's Law Terms in Magnetosheath Turbulence as Observed by Magnetospheric Multiscale. Journal of Geophysical Research: Space Physics, 2021, 126, 2020JA028447.           | 0.8 | 15        |
| 10 | Observations of Mirror Mode Structures in the Dawnâ€Side Magnetosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028649.  | 0.8 | 2         |
| 11 | Evidence for Nonadiabatic Oxygen Energization in the Nearâ€Earth Magnetotail From MMS. Geophysical Research Letters, 2021, 48, e2020GL091697.  | 1.5 | 5         |
| 12 | MMS Observations of Reconnection Separatrix Region in the Magnetotail at Different Distances From the Active Neutral Xâ€Line. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028694.                  | 0.8 | 5         |
| 13 | In Situ Evidence of Ion Acceleration between Consecutive Reconnection Jet Fronts. Astrophysical Journal, 2021, 908, 73.  | 1.6 | 3         |
| 14 | Twoâ€Dimensional Velocity of the Magnetic Structure Observed on July 11, 2017 by the Magnetospheric Multiscale Spacecraft. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028705.                     | 0.8 | 7         |
| 15 | An Encounter With the Ion and Electron Diffusion Regions at a Flapping and Twisted Tail Current Sheet. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028903.   | 0.8 | 8         |
| 16 | Statistical Relationship Between Interplanetary Magnetic Field Conditions and the Helicity Sign of Flux Transfer Event Flux Ropes. Geophysical Research Letters, 2021, 48, e2020GL091257.                                | 1.5 | 6         |
| 17 | Determining EMIC Wave Vector Properties Through Multiâ€Point Measurements: The Wave Curl Analysis. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028922.   | 0.8 | 10        |
| 18 | Electron Trapping in Magnetic Mirror Structures at the Edge of Magnetopause Flux Ropes. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029182.  | 0.8 | 3         |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | MMS Observations of Field Line Resonances Under Disturbed Solar Wind Conditions. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028936.  | 0.8 | 2         |
| 20 | Origin of Electronâ€Scale Magnetic Fluctuations Close to an Electron Diffusion Region. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029046.  | 0.8 | 1         |
| 21 | A Multiâ€Instrument Study of a Dipolarization Event in the Inner Magnetosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029294.   | 0.8 | 0         |
| 22 | Results of the Electron Drift Instrument on Cluster. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029313.  | 0.8 | 1         |
| 23 | Statistical Survey of Collisionless Dissipation in the Terrestrial Magnetosheath. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029000.   | 0.8 | 12        |
| 24 | Microscale Processes Determining Macroscale Evolution of Magnetic Flux Tubes along Earth's Magnetopause. Astrophysical Journal, 2021, 914, 26.  | 1.6 | 6         |
| 25 | Comparison of MMS Observations of Foreshock Bubbles With a Global Hybrid Simulation. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028848.  | 0.8 | 5         |
| 26 | Structures in the terms of the Vlasov equation observed at Earth's magnetopause. Nature Physics, 2021, 17, 1056-1065.   | 6.5 | 15        |
| 27 | Upperâ€Hybrid Waves Driven by Meandering Electrons Around Magnetic Reconnection X Line.<br>Geophysical Research Letters, 2021, 48, e2021GL093164.   | 1.5 | 13        |
| 28 | Remote Sensing of Magnetic Reconnection in the Magnetotail Using In Situ Multipoint Observations at the Plasma Sheet Boundary Layer. Journal of Geophysical Research: Space Physics, 2021, 126, .                 | 0.8 | 4         |
| 29 | Solitary Magnetic Structures at Quasiâ€Parallel Collisionless Shocks: Formation. Geophysical Research Letters, 2021, 48, e2020GL090800.   | 1.5 | 21        |
| 30 | Application of Cold and Hot Plasma Composition Measurements to Investigate Impacts on Duskâ€ide Electromagnetic Ion Cyclotron Waves. Journal of Geophysical Research: Space Physics, 2021, 126, .                 | 0.8 | 5         |
| 31 | The Occurrence and Prevalence of Time Domain Structures in the Kelvin-Helmholtz Instability at Different Positions Along the Earth's Magnetospheric Flanks. Frontiers in Astronomy and Space Sciences, 2021, 8, . | 1.1 | 2         |
| 32 | Thin Current Sheet Behind the Dipolarization Front. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029518.   | 0.8 | 8         |
| 33 | Origin and structure of electromagnetic generator regions at the edge of the electron diffusion region. Physics of Plasmas, 2021, 28, .   | 0.7 | 8         |
| 34 | Bifurcated Current Sheet Observed on the Boundary of Kelvin-Helmholtz Vortices. Frontiers in Astronomy and Space Sciences, 2021, 8, .   | 1.1 | 3         |
| 35 | Mapping MMS Observations of Solitary Waves in Earth's Magnetic Field. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029389.   | 0.8 | 1         |
| 36 | Spatial evolution of magnetic reconnection diffusion region structures with distance from the X-line. Physics of Plasmas, 2021, 28, .   | 0.7 | 3         |

| #  | Article   | IF  | Citations |
|----|---|-----|-----------|
| 37 | Low-frequency Whistler Waves Modulate Electrons and Generate Higher-frequency Whistler Waves in the Solar Wind. Astrophysical Journal, 2021, 923, 216.  | 1.6 | 7         |
| 38 | Electron Bernstein waves driven by electron crescents near the electron diffusion region. Nature Communications, 2020, 11, 141.   | 5.8 | 26        |
| 39 | Terrestrial Bow Shock Parameters From MMS Measurements: Dependence on Upstream and Downstream Time Ranges. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027231.                        | 0.8 | 3         |
| 40 | Multiscale Coupling During Magnetopause Reconnection: Interface Between the Electron and Ion Diffusion Regions. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027985.                   | 0.8 | 10        |
| 41 | Energy Balance and Time Dependence of a Magnetotail Electron Diffusion Region. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028290.  | 0.8 | 3         |
| 42 | Magnetotail reconnection onset caused by electron kinetics with a strong external driver. Nature Communications, 2020, 11, 5049.  | 5.8 | 75        |
| 43 | MMS SITL Ground Loop: Automating the Burst Data Selection Process. Frontiers in Astronomy and Space Sciences, 2020, 7, 54.  | 1.1 | 16        |
| 44 | Electron Inflow Velocities and Reconnection Rates at Earth's Magnetopause and Magnetosheath. Geophysical Research Letters, 2020, 47, e2020GL089082.   | 1.5 | 23        |
| 45 | Chargeâ€Stateâ€Dependent Energization of Suprathermal Ions During Substorm Injections Observed by MMS in the Magnetotail. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028144.         | 0.8 | 8         |
| 46 | Statistical Study of Oxygen Ions Abundance and Spatial Distribution in the Dayside Magnetopause Boundary Layer: MMS Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027323. | 0.8 | 4         |
| 47 | A Study of a Magnetic Cloud Propagating Through Largeâ€Amplitude Alfvén Waves. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027638.  | 0.8 | 4         |
| 48 | Magnetospheric Multiscale observations of energetic oxygen ions at the duskside magnetopause during intense substorms. Annales Geophysicae, 2020, 38, 123-135.  | 0.6 | 2         |
| 49 | Parallel Electrostatic Waves Associated With Turbulent Plasma Mixing in the Kelvinâ€Helmholtz<br>Instability. Geophysical Research Letters, 2020, 47, e2020GL087837.  | 1.5 | 7         |
| 50 | Intermittency and Ion Temperature–Anisotropy Instabilities: Simulation and Magnetosheath Observation. Astrophysical Journal, 2020, 895, 83.   | 1.6 | 10        |
| 51 | Characteristics of Minor Ions and Electrons in Flux Transfer Events Observed by the Magnetospheric Multiscale Mission. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027778.            | 0.8 | 8         |
| 52 | Cluster and MMS Simultaneous Observations of Magnetosheath High Speed Jets and Their Impact on the Magnetopause. Frontiers in Astronomy and Space Sciences, 2020, 6, .                                      | 1.1 | 18        |
| 53 | Statistics of Kinetic Dissipation in the Earth's Magnetosheath: MMS Observations. Physical Review Letters, 2020, 124, 255101.   | 2.9 | 41        |
| 54 | Lower-Hybrid Drift Waves Driving Electron Nongyrotropic Heating and Vortical Flows in a Magnetic Reconnection Layer. Physical Review Letters, 2020, 125, 025103.  | 2.9 | 29        |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | Characteristics of Escaping Magnetospheric Ions Associated With Magnetic Field Fluctuations. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027337.               | 0.8 | 2         |
| 56 | Asymmetric Reconnection Within a Flux Ropeâ€Type Dipolarization Front. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027296.                                     | 0.8 | 7         |
| 57 | A New Method of 3â€D Magnetic Field Reconstruction. Geophysical Research Letters, 2020, 47, e2019GL085542.   | 1.5 | 29        |
| 58 | Electron Heating by Debye-Scale Turbulence in Guide-Field Reconnection. Physical Review Letters, 2020, 124, 045101.  | 2.9 | 31        |
| 59 | Statistics of Reconnecting Current Sheets in the Transition Region of Earth's Bow Shock. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027119.                   | 0.8 | 32        |
| 60 | Polynomial Reconstruction of the Reconnection Magnetic Field Observed by Multiple Spacecraft. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027481.              | 0.8 | 38        |
| 61 | Magnetic Reconnection Inside a Flux Rope Induced by Kelvinâ€Helmholtz Vortices. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027665.                            | 0.8 | 26        |
| 62 | In Situ Measurement of Curvature of Magnetic Field in Turbulent Space Plasmas: A Statistical Study. Astrophysical Journal Letters, 2020, 893, L25.                                   | 3.0 | 11        |
| 63 | Sequential Observations of Flux Transfer Events, Polewardâ€Moving Auroral Forms, and Polar Cap<br>Patches. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027674. | 0.8 | 12        |
| 64 | Energy Flux Densities near the Electron Dissipation Region in Asymmetric Magnetopause Reconnection. Physical Review Letters, 2020, 125, 265102.                                      | 2.9 | 17        |
| 65 | Particle Acceleration in Strong Turbulence in the Earth's Magnetotail. Astrophysical Journal, 2020, 898, 153.  | 1.6 | 27        |
| 66 | Observations of Particle Acceleration in Magnetic Reconnection–driven Turbulence. Astrophysical Journal, 2020, 898, 154.   | 1.6 | 36        |
| 67 | Ion-scale Current Structures in Short Large-amplitude Magnetic Structures. Astrophysical Journal, 2020, 898, 121.  | 1.6 | 12        |
| 68 | Direct Measurement of the Solar-wind Taylor Microscale Using MMS Turbulence Campaign Data. Astrophysical Journal, 2020, 899, 63.   | 1.6 | 21        |
| 69 | Observation of Energy Conversion Near the X-line in Asymmetric Guide-field Reconnection.<br>Astrophysical Journal Letters, 2020, 895, L10.   | 3.0 | 2         |
| 70 | Substormâ€Related Nearâ€Earth Reconnection Surge: Combining Telescopic and Microscopic Views. Geophysical Research Letters, 2019, 46, 6239-6247.                                     | 1.5 | 1         |
| 71 | Electron Vorticity Indicative of the Electron Diffusion Region of Magnetic Reconnection. Geophysical Research Letters, 2019, 46, 6287-6296.  | 1.5 | 23        |
| 72 | Velocity Rotation Events in the Outer Magnetosphere Near the Magnetopause. Journal of Geophysical Research: Space Physics, 2019, 124, 4137-4156.                                     | 0.8 | 3         |

| #  | Article  | IF  | Citations |
|----|--|-----|-----------|
| 73 | Sign Singularity of the Local Energy Transfer in Space Plasma Turbulence. Frontiers in Physics, 2019, 7,   | 1.0 | 9         |
| 74 | Investigation of Massâ€∤Chargeâ€Dependent Escape of Energetic Ions Across the Magnetopauses of Earth and Jupiter. Journal of Geophysical Research: Space Physics, 2019, 124, 5539-5567.                                | 0.8 | 15        |
| 75 | Energy Conversion and Electron Acceleration in the Magnetopause Reconnection Diffusion Region.<br>Geophysical Research Letters, 2019, 46, 10274-10282.   | 1.5 | 10        |
| 76 | A Survey of Plasma Waves Appearing Near Dayside Magnetopause Electron Diffusion Region Events. Journal of Geophysical Research: Space Physics, 2019, 124, 7837-7849.   | 0.8 | 20        |
| 77 | Dissipation of Earthward Propagating Flux Rope Through Reâ€reconnection with Geomagnetic Field: An MMS Case Study. Journal of Geophysical Research: Space Physics, 2019, 124, 7477-7493.                               | 0.8 | 15        |
| 78 | Fourâ€Spacecraft Measurements of the Shape and Dimensionality of Magnetic Structures in the Nearâ€Earth Plasma Environment. Journal of Geophysical Research: Space Physics, 2019, 124, 6850-6868.                      | 0.8 | 7         |
| 79 | Reconnection With Magnetic Flux Pileup at the Interface of Converging Jets at the Magnetopause.<br>Geophysical Research Letters, 2019, 46, 1937-1946.  | 1.5 | 36        |
| 80 | Turbulence-Driven Ion Beams in the Magnetospheric Kelvin-Helmholtz Instability. Physical Review Letters, 2019, 122, 035102.  | 2.9 | 62        |
| 81 | Observations of an Electron Diffusion Region in Symmetric Reconnection with Weak Guide Field.<br>Astrophysical Journal, 2019, 870, 34.   | 1.6 | 79        |
| 82 | Observational Evidence of Magnetic Reconnection in the Terrestrial Bow Shock Transition Region. Geophysical Research Letters, 2019, 46, 562-570.   | 1.5 | 47        |
| 83 | Structure of the Current Sheet in the 11 July 2017 Electron Diffusion Region Event. Journal of Geophysical Research: Space Physics, 2019, 124, 1173-1186.  | 0.8 | 34        |
| 84 | Prolonged Kelvin–Helmholtz Waves at Dawn and Dusk Flank Magnetopause: Simultaneous Observations by MMS and THEMIS. Astrophysical Journal, 2019, 875, 57.   | 1.6 | 10        |
| 85 | Highâ€Resolution Measurements of the Crossâ€Shock Potential, Ion Reflection, and Electron Heating at an Interplanetary Shock by MMS. Journal of Geophysical Research: Space Physics, 2019, 124, 3961-3978.             | 0.8 | 36        |
| 86 | Numerical Algorithm for Detecting Ion Diffusion Regions in the Geomagnetic Tail With Applications to MMS Tail Season 1 May to 30 September 2017. Journal of Geophysical Research: Space Physics, 2019, 124, 6487-6503. | 0.8 | 15        |
| 87 | Properties of the Turbulence Associated with Electron-only Magnetic Reconnection in Earth's<br>Magnetosheath. Astrophysical Journal Letters, 2019, 877, L37.   | 3.0 | 80        |
| 88 | Electron Diffusion Regions in Magnetotail Reconnection Under Varying Guide Fields. Geophysical Research Letters, 2019, 46, 6230-6238.  | 1.5 | 33        |
| 89 | EMIC Waves in the Outer Magnetosphere: Observations of an Offâ€Equator Source Region. Geophysical Research Letters, 2019, 46, 5707-5716.   | 1.5 | 29        |
| 90 | Whistler Waves Driven by Fieldâ€Aligned Streaming Electrons in the Nearâ€Earth Magnetotail Reconnection. Geophysical Research Letters, 2019, 46, 5045-5054.  | 1.5 | 18        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 91  | MMS Observations of Kinetic-size Magnetic Holes in the Terrestrial Magnetotail Plasma Sheet. Astrophysical Journal, 2019, 875, 113.   | 1.6 | 21        |
| 92  | Improved Determination of Plasma Density Based on Spacecraft Potential of the Magnetospheric Multiscale Mission Under Active Potential Control. IEEE Transactions on Plasma Science, 2019, 47, 3636-3647. | 0.6 | 9         |
| 93  | Magnetospheric Multiscale Observations of ULF Waves and Correlated Lowâ€Energy Ion Monoenergetic Acceleration. Journal of Geophysical Research: Space Physics, 2019, 124, 2788-2794.                      | 0.8 | 5         |
| 94  | Magnetospheric Multiscale Observation of Kinetic Signatures in the Alfvén Vortex. Astrophysical Journal Letters, 2019, 871, L22.  | 3.0 | 25        |
| 95  | Observations of Flux Ropes With Strong Energy Dissipation in the Magnetotail. Geophysical Research Letters, 2019, 46, 580-589.  | 1.5 | 31        |
| 96  | Impulsively Reflected Ions: A Plausible Mechanism for Ion Acoustic Wave Growth in Collisionless Shocks. Journal of Geophysical Research: Space Physics, 2019, 124, 1855-1865.                             | 0.8 | 16        |
| 97  | Highâ€Frequency Wave Generation in Magnetotail Reconnection: Linear Dispersion Analysis. Geophysical Research Letters, 2019, 46, 4089-4097.   | 1.5 | 32        |
| 98  | In situ spacecraft observations of a structured electron diffusion region during magnetopause reconnection. Physical Review E, 2019, 99, 043204.  | 0.8 | 11        |
| 99  | Observations of Magnetic Reconnection in the Transition Region of Quasiâ€Parallel Shocks.<br>Geophysical Research Letters, 2019, 46, 1177-1184.   | 1.5 | 51        |
| 100 | Magnetic Reconnection in Three Dimensions: Observations of Electromagnetic Drift Waves in the Adjacent Current Sheet. Journal of Geophysical Research: Space Physics, 2019, 124, 10104-10118.             | 0.8 | 6         |
| 101 | Electronâ€Scale Magnetic Structure Observed Adjacent to an Electron Diffusion Region at the Dayside Magnetopause. Journal of Geophysical Research: Space Physics, 2019, 124, 10153-10169.                 | 0.8 | 4         |
| 102 | Can Reconnection be Triggered as a Solar Wind Directional Discontinuity Crosses the Bow Shock? AÂCaseÂof Asymmetric Reconnection. Journal of Geophysical Research: Space Physics, 2019, 124, 8507-8523.   | 0.8 | 10        |
| 103 | Electron Scattering by Low-frequency Whistler Waves at Earth's Bow Shock. Astrophysical Journal, 2019, 886, 53.   | 1.6 | 28        |
| 104 | Magnetic Reconnection in Three Dimensions: Modeling and Analysis of Electromagnetic Drift Waves in the Adjacent Current Sheet. Journal of Geophysical Research: Space Physics, 2019, 124, 10085-10103.    | 0.8 | 18        |
| 105 | Waves in Kineticâ€Scale Magnetic Dips: MMS Observations in the Magnetosheath. Geophysical Research Letters, 2019, 46, 523-533.  | 1.5 | 49        |
| 106 | Reconstruction of the Electron Diffusion Region of Magnetotail Reconnection Seen by the MMS Spacecraft on 11 July 2017. Journal of Geophysical Research: Space Physics, 2019, 124, 122-138.               | 0.8 | 25        |
| 107 | The Properties of Lion Roars and Electron Dynamics in Mirror Mode Waves Observed by the Magnetospheric MultiScale Mission. Journal of Geophysical Research: Space Physics, 2018, 123, 93-103.             | 0.8 | 26        |
| 108 | Largeâ€Scale Survey of the Structure of the Dayside Magnetopause by MMS. Journal of Geophysical Research: Space Physics, 2018, 123, 2018-2033.  | 0.8 | 27        |

| #   | Article  | IF  | Citations |
|-----|--|-----|-----------|
| 109 | Energy partitioning constraints at kinetic scales in low- $\langle i \rangle \hat{l}^2 \langle i \rangle$ turbulence. Physics of Plasmas, 2018, 25, .  | 0.7 | 25        |
| 110 | Violation of Field Line Conservation and Associated Spatial Scales in Particleâ€inâ€Cell Simulations and MMS Data. Journal of Geophysical Research: Space Physics, 2018, 123, 1853-1884.   | 0.8 | 0         |
| 111 | Determining <b><i>L</i></b> â€ <b><i>M</i></b> â€ <b><i>N</i></b> <current 123,="" 2018,="" 2274-2295.<="" at="" coordinates="" data.="" from="" geophysical="" journal="" magnetopause="" magnetospheric="" multiscale="" of="" physics,="" research:="" sheet="" space="" td="" the=""><td>0.8</td><td>38</td></current> | 0.8 | 38        |
| 112 | Magnetic Reconnection, Turbulence, and Particle Acceleration: Observations in the Earth's Magnetotail. Geophysical Research Letters, 2018, 45, 3338-3347.  | 1.5 | 69        |
| 113 | MMS Examination of FTEs at the Earth's Subsolar Magnetopause. Journal of Geophysical Research: Space Physics, 2018, 123, 1224-1241.  | 0.8 | 39        |
| 114 | Electron Crescent Distributions as a Manifestation of Diamagnetic Drift in an Electronâ€Scale Current Sheet: Magnetospheric Multiscale Observations Using New 7.5Âms Fast Plasma Investigation Moments. Geophysical Research Letters, 2018, 45, 578-584.   | 1.5 | 52        |
| 115 | MMS Observation of Asymmetric Reconnection Supported by 3â€D Electron Pressure Divergence. Journal of Geophysical Research: Space Physics, 2018, 123, 1806-1821.   | 0.8 | 34        |
| 116 | Electron Dynamics Within the Electron Diffusion Region of Asymmetric Reconnection. Journal of Geophysical Research: Space Physics, 2018, 123, 146-162.   | 0.8 | 10        |
| 117 | Differing Properties of Two Ionâ€Scale Magnetopause Flux Ropes. Journal of Geophysical Research: Space Physics, 2018, 123, 114-131.  | 0.8 | 8         |
| 118 | Negative Potential Solitary Structures in the Magnetosheath With Large Parallel Width. Journal of Geophysical Research: Space Physics, 2018, 123, 132-145.   | 0.8 | 16        |
| 119 | Guide Field Reconnection: Exhaust Structure and Heating. Geophysical Research Letters, 2018, 45, 4569-4577.  | 1.5 | 34        |
| 120 | Plasma Density Estimates From Spacecraft Potential Using MMS Observations in the Dayside Magnetosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 2620-2629.  | 0.8 | 16        |
| 121 | Localized Oscillatory Energy Conversion in Magnetopause Reconnection. Geophysical Research Letters, 2018, 45, 1237-1245.   | 1.5 | 41        |
| 122 | Wave Phenomena and Beamâ€Plasma Interactions at the Magnetopause Reconnection Region. Journal of Geophysical Research: Space Physics, 2018, 123, 1118-1133.  | 0.8 | 19        |
| 123 | In Situ Observation of Intermittent Dissipation at Kinetic Scales in the Earth's Magnetosheath.<br>Astrophysical Journal Letters, 2018, 856, L19.  | 3.0 | 55        |
| 124 | Effects in the Nearâ€Magnetopause Magnetosheath Elicited by Largeâ€Amplitude Alfvénic Fluctuations Terminating in a Field and Flow Discontinuity. Journal of Geophysical Research: Space Physics, 2018, 123, 8983-9004.  | 0.8 | 3         |
| 125 | Multiscale Currents Observed by MMS in the Flow Braking Region. Journal of Geophysical Research: Space Physics, 2018, 123, 1260-1278.  | 0.8 | 32        |
| 126 | How Accurately Can We Measure the Reconnection Rate <b><i>E</i></b> <sub><b><i>M</i></b></sub> <for 11="" 123,="" 2017?.="" 2018,="" 9130-9149.<="" diffusion="" event="" geophysical="" journal="" july="" mms="" of="" physics,="" region="" research:="" space="" td="" the=""><td>0.8</td><td>64</td></for>            | 0.8 | 64        |

| #   | Article   | IF  | CITATIONS  |
|-----|---|-----|------------|
| 127 | Magnetospheric Multiscale Dayside Reconnection Electron Diffusion Region Events. Journal of Geophysical Research: Space Physics, 2018, 123, 4858-4878.  | 0.8 | <b>7</b> 9 |
| 128 | Magnetospheric Multiscale Observations of an Ion Diffusion Region With Large Guide Field at the Magnetopause: Current System, Electron Heating, and Plasma Waves. Journal of Geophysical Research: Space Physics, 2018, 123, 1834-1852. | 0.8 | 32         |
| 129 | Shock ripples observed by the MMS spacecraft: ion reflection and dispersive properties. Plasma Physics and Controlled Fusion, 2018, 60, 125006.   | 0.9 | 25         |
| 130 | Electron Phaseâ€Space Holes in Three Dimensions: Multispacecraft Observations by Magnetospheric Multiscale. Journal of Geophysical Research: Space Physics, 2018, 123, 9963-9978.   | 0.8 | 31         |
| 131 | Electron-scale dynamics of the diffusion region during symmetric magnetic reconnection in space. Science, 2018, 362, 1391-1395.   | 6.0 | 221        |
| 132 | Incompressive Energy Transfer in the Earth's Magnetosheath: Magnetospheric Multiscale Observations. Astrophysical Journal, 2018, 866, 106.  | 1.6 | 42         |
| 133 | Magnetotail Hall Physics in the Presence of Cold Ions. Geophysical Research Letters, 2018, 45, 10,941.  | 1.5 | 17         |
| 134 | Kinetic Range Spectral Features of Cross Helicity Using the Magnetospheric Multiscale Spacecraft. Physical Review Letters, 2018, 121, 265101.   | 2.9 | 17         |
| 135 | Rippled Electronâ€Scale Structure of a Dipolarization Front. Geophysical Research Letters, 2018, 45, 12,116.  | 1.5 | 38         |
| 136 | Higherâ€Order Turbulence Statistics in the Earth's Magnetosheath and the Solar Wind Using Magnetospheric Multiscale Observations. Journal of Geophysical Research: Space Physics, 2018, 123, 9941-9954.                                 | 0.8 | 51         |
| 137 | Largeâ€Amplitude Highâ€Frequency Waves at Earth's Magnetopause. Journal of Geophysical Research:<br>Space Physics, 2018, 123, 2630-2657.  | 0.8 | 30         |
| 138 | MMS Observations of Electrostatic Waves in an Oblique Shock Crossing. Journal of Geophysical Research: Space Physics, 2018, 123, 9430-9442.   | 0.8 | 58         |
| 139 | On the role of separatrix instabilities in heating the reconnection outflow region. Physics of Plasmas, 2018, 25, .   | 0.7 | 27         |
| 140 | The two-fluid dynamics and energetics of the asymmetric magnetic reconnection in laboratory and space plasmas. Nature Communications, 2018, 9, 5223.  | 5.8 | 18         |
| 141 | MMS Observations of Beta-dependent Constraints on Ion Temperature Anisotropy in Earth's<br>Magnetosheath. Astrophysical Journal, 2018, 866, 25.   | 1.6 | 21         |
| 142 | MMS, Van Allen Probes, GOES 13, and Groundâ€Based Magnetometer Observations of EMIC Wave Events Before, During, and After a Modest Interplanetary Shock. Journal of Geophysical Research: Space Physics, 2018, 123, 8331-8357.          | 0.8 | 30         |
| 143 | Observational Evidence of Largeâ€Scale Multiple Reconnection at the Earth's Dayside Magnetopause.<br>Journal of Geophysical Research: Space Physics, 2018, 123, 8407-8421.  | 0.8 | 21         |
| 144 | Smallâ€Scale Flux Transfer Events Formed in the Reconnection Exhaust Region Between Two X Lines. Journal of Geophysical Research: Space Physics, 2018, 123, 8473-8488.  | 0.8 | 23         |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 145 | Solar Wind Turbulence Studies Using MMS Fast Plasma Investigation Data. Astrophysical Journal, 2018, 866, 81.   | 1.6  | 48        |
| 146 | Simultaneous Multispacecraft Probing of Electron Phase Space Holes. Geophysical Research Letters, 2018, 45, 11,513.   | 1.5  | 35        |
| 147 | Ion Kinetics in a Hot Flow Anomaly: MMS Observations. Geophysical Research Letters, 2018, 45, 11,520.   | 1.5  | 28        |
| 148 | Measurement of the Magnetic Reconnection Rate in the Earth's Magnetotail. Journal of Geophysical Research: Space Physics, 2018, 123, 9150-9168.   | 0.8  | 50        |
| 149 | A Statistical Study of Slowâ€Mode Shocks Observed by MMS in the Dayside Magnetopause. Geophysical Research Letters, 2018, 45, 4675-4684.  | 1.5  | 1         |
| 150 | Autogenous and efficient acceleration of energetic ions upstream of Earth's bow shock. Nature, 2018, 561, 206-210.  | 13.7 | 47        |
| 151 | Electron Energization at a Reconnecting Magnetosheath Current Sheet. Geophysical Research Letters, 2018, 45, 8081-8090.   | 1.5  | 20        |
| 152 | Local Excitation of Whistler Mode Waves and Associated Langmuir Waves at Dayside Reconnection Regions. Geophysical Research Letters, 2018, 45, 8793-8802.                                   | 1.5  | 19        |
| 153 | Electron Bulk Acceleration and Thermalization at Earth's Quasiperpendicular Bow Shock. Physical Review Letters, 2018, 120, 225101.  | 2.9  | 38        |
| 154 | Electronâ€Scale Measurements of Dipolarization Front. Geophysical Research Letters, 2018, 45, 4628-4638.  | 1.5  | 77        |
| 155 | Observations of Whistler Waves Correlated with Electron-scale Coherent Structures in the Magnetosheath Turbulent Plasma. Astrophysical Journal, 2018, 861, 29.                              | 1.6  | 46        |
| 156 | Observations of the Electron Jet Generated by Secondary Reconnection in the Terrestrial Magnetotail. Astrophysical Journal, 2018, 862, 144.   | 1.6  | 43        |
| 157 | The Role of the Parallel Electric Field in Electronâ€Scale Dissipation at Reconnecting Currents in the Magnetosheath. Journal of Geophysical Research: Space Physics, 2018, 123, 6533-6547. | 0.8  | 40        |
| 158 | Generation of Electron Whistler Waves at the Mirror Mode Magnetic Holes: MMS Observations and PIC Simulation. Journal of Geophysical Research: Space Physics, 2018, 123, 6383-6393.         | 0.8  | 27        |
| 159 | Carriers and Sources of Magnetopause Current: MMS Case Study. Journal of Geophysical Research: Space Physics, 2018, 123, 5464-5475.   | 0.8  | 12        |
| 160 | Energy Conversion and Collisionless Plasma Dissipation Channels in the Turbulent Magnetosheath Observed by the Magnetospheric Multiscale Mission. Astrophysical Journal, 2018, 862, 32.     | 1.6  | 55        |
| 161 | Electron magnetic reconnection without ion coupling in Earth's turbulent magnetosheath. Nature, 2018, 557, 202-206.   | 13.7 | 263       |
| 162 | MMS Observations of Harmonic Electromagnetic Ion Cyclotron Waves. Geophysical Research Letters, 2018, 45, 8764-8772.  | 1.5  | 18        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | Intense Electric Fields and Electronâ€Scale Substructure Within Magnetotail Flux Ropes as Revealed by the Magnetospheric Multiscale Mission. Geophysical Research Letters, 2018, 45, 8783-8792.                             | 1.5 | 34        |
| 164 | New Insights into the Nature of Turbulence in the Earth's Magnetosheath Using Magnetospheric MultiScale Mission Data. Astrophysical Journal, 2018, 859, 127.  | 1.6 | 23        |
| 165 | Solitary Waves Across Supercritical Quasiâ€Perpendicular Shocks. Geophysical Research Letters, 2018, 45, 5809-5817.   | 1.5 | 43        |
| 166 | Hodographic approach for determining spacecraft trajectories through magnetic reconnection diffusion regions. Geophysical Research Letters, 2017, 44, 1625-1633.  | 1.5 | 7         |
| 167 | "Zipperâ€ike―periodic magnetosonic waves: Van Allen Probes, THEMIS, and magnetospheric multiscale observations. Journal of Geophysical Research: Space Physics, 2017, 122, 1600-1610.                                       | 0.8 | 12        |
| 168 | In situ statistical observations of Pc1 pearl pulsations and unstructured EMIC waves by the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2017, 122, 105-119.   | 0.8 | 25        |
| 169 | Magnetospheric Multiscale Observations of Electron Vortex Magnetic Hole in the Turbulent<br>Magnetosheath Plasma. Astrophysical Journal Letters, 2017, 836, L27.  | 3.0 | 85        |
| 170 | On the origin of the crescentâ€shaped distributions observed by MMS at the magnetopause. Journal of Geophysical Research: Space Physics, 2017, 122, 2024-2039.  | 0.8 | 43        |
| 171 | Evolution of a typical ionâ€scale magnetic flux rope caused by thermal pressure enhancement. Journal of Geophysical Research: Space Physics, 2017, 122, 2040-2050.  | 0.8 | 18        |
| 172 | Kinetic AlfvÃ $\odot$ n wave explanation of the Hall fields in magnetic reconnection. Geophysical Research Letters, 2017, 44, 634-640.  | 1.5 | 52        |
| 173 | Electron Heating at Kinetic Scales in Magnetosheath Turbulence. Astrophysical Journal, 2017, 836, 247.  | 1.6 | 50        |
| 174 | Magnetospheric Multiscale mission observations of the outer electron diffusion region. Geophysical Research Letters, 2017, 44, 2049-2059.   | 1.5 | 41        |
| 175 | Quantitative analysis of a Hall system in the exhaust of asymmetric magnetic reconnection. Journal of Geophysical Research: Space Physics, 2017, 122, 5277-5289.  | 0.8 | 21        |
| 176 | Largeâ€scale characteristics of reconnection diffusion regions and associated magnetopause crossings observed by MMS. Journal of Geophysical Research: Space Physics, 2017, 122, 5466-5486.                                 | 0.8 | 48        |
| 177 | The nonlinear behavior of whistler waves at the reconnecting dayside magnetopause as observed by the Magnetospheric Multiscale mission: A case study. Journal of Geophysical Research: Space Physics, 2017, 122, 5487-5501. | 0.8 | 22        |
| 178 | MMS observations of whistler waves in electron diffusion region. Geophysical Research Letters, 2017, 44, 3954-3962.   | 1.5 | 89        |
| 179 | Electron Scattering by High-frequency Whistler Waves at Earth's Bow Shock. Astrophysical Journal Letters, 2017, 842, L11.   | 3.0 | 46        |
| 180 | Electron diffusion region during magnetopause reconnection with an intermediate guide field: Magnetospheric multiscale observations. Journal of Geophysical Research: Space Physics, 2017, 122, 5235-5246.                  | 0.8 | 52        |

| #   | Article  | IF  | Citations |
|-----|--|-----|-----------|
| 181 | Global observations of magnetospheric highâ€ <i>m</i> poloidal waves during the 22 June 2015 magnetic storm. Geophysical Research Letters, 2017, 44, 3456-3464.  | 1.5 | 43        |
| 182 | Reconstruction of the electron diffusion region observed by the Magnetospheric Multiscale spacecraft: First results. Geophysical Research Letters, 2017, 44, 4566-4574.  | 1.5 | 27        |
| 183 | Parallel electron heating in the magnetospheric inflow region. Geophysical Research Letters, 2017, 44, 4384-4392.  | 1.5 | 8         |
| 184 | Structure, force balance, and topology of Earth's magnetopause. Science, 2017, 356, 960-963.   | 6.0 | 10        |
| 185 | Quadrupolar pattern of the asymmetric guideâ€field reconnection. Journal of Geophysical Research: Space Physics, 2017, 122, 6349-6356.   | 0.8 | 40        |
| 186 | Structure and evolution of flux transfer events near dayside magnetic reconnection dissipation region: MMS observations. Geophysical Research Letters, 2017, 44, 5951-5959.  | 1.5 | 26        |
| 187 | Wave-particle energy exchange directly observed in a kinetic Alfv $\tilde{A}$ @n-branch wave. Nature Communications, 2017, 8, 14719.   | 5.8 | 73        |
| 188 | Drift waves, intense parallel electric fields, and turbulence associated with asymmetric magnetic reconnection at the magnetopause. Geophysical Research Letters, 2017, 44, 2978-2986.   | 1.5 | 46        |
| 189 | EDR signatures observed by MMS in the 16 October event presented in a 2â€D parametric space. Journal of Geophysical Research: Space Physics, 2017, 122, 3262-3276.   | 0.8 | 2         |
| 190 | A direct examination of the dynamics of dipolarization fronts using MMS. Journal of Geophysical Research: Space Physics, 2017, 122, 4335-4347.   | 0.8 | 44        |
| 191 | MMS observation of inverse energy dispersion in shock drift accelerated ions. Journal of Geophysical Research: Space Physics, 2017, 122, 3232-3246.  | 0.8 | 1         |
| 192 | Lower hybrid waves in the ion diffusion and magnetospheric inflow regions. Journal of Geophysical Research: Space Physics, 2017, 122, 517-533.   | 0.8 | 108       |
| 193 | MMS Observation of Magnetic Reconnection in the Turbulent Magnetosheath. Journal of Geophysical Research: Space Physics, 2017, 122, 11,442.  | 0.8 | 73        |
| 194 | Relativistic Electron Increase During Chorus Wave Activities on the 6-8 March 2016 Geomagnetic Storm. Journal of Geophysical Research: Space Physics, 2017, 122, 11,302-11,319.  | 0.8 | 5         |
| 195 | Multipoint Observations of Energetic Particle Injections and Substorm Activity During a Conjunction Between Magnetospheric Multiscale (MMS) and Van Allen Probes. Journal of Geophysical Research: Space Physics, 2017, 122, 11,481.   | 0.8 | 42        |
| 196 | Examining Coherency Scales, Substructure, and Propagation of Whistler Mode Chorus Elements With Magnetospheric Multiscale (MMS). Journal of Geophysical Research: Space Physics, 2017, 122, 11,201.  | 0.8 | 18        |
| 197 | MMS Observations and Hybrid Simulations of Surface Ripples at a Marginally Quasiâ€Parallel Shock. Journal of Geophysical Research: Space Physics, 2017, 122, 11,003.   | 0.8 | 53        |
| 198 | Lower Hybrid Drift Waves and Electromagnetic Electron Spaceâ€Phase Holes Associated With Dipolarization Fronts and Fieldâ€Aligned Currents Observed by the Magnetospheric Multiscale Mission During a Substorm. Journal of Geophysical Research: Space Physics, 2017, 122, 12,236. | 0.8 | 31        |

| #   | Article   | lF  | CITATIONS |
|-----|---|-----|-----------|
| 199 | Spacecraft and Instrument Photoelectrons Measured by the Dual Electron Spectrometers on MMS. Journal of Geophysical Research: Space Physics, 2017, 122, 11,548.   | 0.8 | 39        |
| 200 | Simultaneous Remote Observations of Intense Reconnection Effects by DMSP and MMS Spacecraft During a Storm Time Substorm. Journal of Geophysical Research: Space Physics, 2017, 122, 10891-10909.                     | 0.8 | 17        |
| 201 | The Effect of a Guide Field on Local Energy Conversion During Asymmetric Magnetic Reconnection: MMS Observations. Journal of Geophysical Research: Space Physics, 2017, 122, 11,342.                                  | 0.8 | 45        |
| 202 | Cold Ionospheric Ions in the Magnetic Reconnection Outflow Region. Journal of Geophysical Research: Space Physics, 2017, 122, 10,194.   | 0.8 | 19        |
| 203 | MMS Observations of Reconnection at Dayside Magnetopause Crossings During Transitions of the Solar Wind to Subâ€AlfvĂ©nic Flow. Journal of Geophysical Research: Space Physics, 2017, 122, 9934-9951.                 | 0.8 | 3         |
| 204 | Magnetosheath High‧peed Jets: Internal Structure and Interaction With Ambient Plasma. Journal of Geophysical Research: Space Physics, 2017, 122, 10,157.  | 0.8 | 23        |
| 205 | Coalescence of Macroscopic Flux Ropes at the Subsolar Magnetopause: Magnetospheric Multiscale Observations. Physical Review Letters, 2017, 119, 055101.   | 2.9 | 72        |
| 206 | Dayside response of the magnetosphere to a small shock compression: Van Allen Probes, Magnetospheric MultiScale, and GOESâ€13. Geophysical Research Letters, 2017, 44, 8712-8720.                                     | 1.5 | 15        |
| 207 | High-resolution Statistics of Solar Wind Turbulence at Kinetic Scales Using the Magnetospheric Multiscale Mission. Astrophysical Journal Letters, 2017, 844, L9.  | 3.0 | 30        |
| 208 | Instability of Agyrotropic Electron Beams near the Electron Diffusion Region. Physical Review Letters, 2017, 119, 025101.   | 2.9 | 46        |
| 209 | Statistical analysis of MMS observations of energetic electron escape observed at/beyond the dayside magnetopause. Journal of Geophysical Research: Space Physics, 2017, 122, 9440-9463.                              | 0.8 | 14        |
| 210 | Structure and Dissipation Characteristics of an Electron Diffusion Region Observed by MMS During a Rapid, Normalâ€Incidence Magnetopause Crossing. Journal of Geophysical Research: Space Physics, 2017, 122, 11,901. | 0.8 | 18        |
| 211 | Multipoint Measurements of the Electron Jet of Symmetric Magnetic Reconnection with a Moderate Guide Field. Physical Review Letters, 2017, 118, 265101.   | 2.9 | 44        |
| 212 | A statistical study of kineticâ€size magnetic holes in turbulent magnetosheath: MMS observations.<br>Journal of Geophysical Research: Space Physics, 2017, 122, 8577-8588.  | 0.8 | 64        |
| 213 | Influence of the Ambient Electric Field on Measurements of the Actively Controlled Spacecraft Potential by MMS. Journal of Geophysical Research: Space Physics, 2017, 122, 12,019.                                    | 0.8 | 9         |
| 214 | The occurrence and wave properties of EMIC waves observed by the Magnetospheric Multiscale (MMS) mission. Journal of Geophysical Research: Space Physics, 2017, 122, 8228-8240.                                       | 0.8 | 44        |
| 215 | Magnetospheric Multiscale analysis of intense fieldâ€aligned Poynting flux near the Earth's plasma sheet boundary. Geophysical Research Letters, 2017, 44, 7106-7113.   | 1.5 | 16        |
| 216 | Magnetospheric Multiscale Overview and Science Objectives. , 2017, , 5-21.  |     | 23        |

| #   | Article   | IF  | Citations |
|-----|---|-----|-----------|
| 217 | The Spin-Plane Double Probe Electric Field Instrument for MMS. , 2017, , 137-165.   |     | 6         |
| 218 | The Search-Coil Magnetometer for MMS. , 2017, , 257-282.  |     | 0         |
| 219 | The Axial Double Probe and Fields Signal Processing for the MMS Mission. , 2017, , 167-188.   |     | 3         |
| 220 | The Electron Drift Instrument for MMS. , 2017, , 283-305.   |     | 0         |
| 221 | Optimized merging of search coil and fluxgate data for MMS. Geoscientific Instrumentation, Methods and Data Systems, 2016, 5, 521-530.  | 0.6 | 22        |
| 222 | Magnetopause erosion during the 17 March 2015 magnetic storm: Combined fieldâ€aligned currents, auroral oval, and magnetopause observations. Geophysical Research Letters, 2016, 43, 2396-2404.                             | 1.5 | 36        |
| 223 | Currents and associated electron scattering and bouncing near the diffusion region at Earth's magnetopause. Geophysical Research Letters, 2016, 43, 3042-3050.  | 1.5 | 81        |
| 224 | Ionâ€scale secondary flux ropes generated by magnetopause reconnection as resolved by MMS. Geophysical Research Letters, 2016, 43, 4716-4724.   | 1.5 | 95        |
| 225 | Electron jet of asymmetric reconnection. Geophysical Research Letters, 2016, 43, 5571-5580.   | 1.5 | 66        |
| 226 | Electron scale structures and magnetic reconnection signatures in the turbulent magnetosheath. Geophysical Research Letters, 2016, 43, 5969-5978.   | 1.5 | 92        |
| 227 | Energetic electron acceleration observed by MMS in the vicinity of an Xâ€line crossing. Geophysical Research Letters, 2016, 43, 7356-7363.  | 1.5 | 21        |
| 228 | Nonlinearity in chorus waves during a geomagnetic storm on 1 November 2012. Journal of Geophysical Research: Space Physics, 2016, 121, 358-373.   | 0.8 | 3         |
| 229 | Study of the spacecraft potential under active control and plasma density estimates during the MMS commissioning phase. Geophysical Research Letters, 2016, 43, 4858-4864.  | 1.5 | 13        |
| 230 | The dependence on geomagnetic conditions and solar wind dynamic pressure of the spatial distributions of EMIC waves observed by the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2016, 121, 4362-4377. | 0.8 | 76        |
| 231 | Twoâ€scale ion meandering caused by the polarization electric field during asymmetric reconnection. Geophysical Research Letters, 2016, 43, 7831-7839.  | 1.5 | 19        |
| 232 | EMIC waves and associated relativistic electron precipitation on 25–26 January 2013. Journal of Geophysical Research: Space Physics, 2016, 121, 11,086.   | 0.8 | 36        |
| 233 | Electron-scale measurements of magnetic reconnection in space. Science, 2016, 352, aaf2939.   | 6.0 | 545       |
| 234 | Observations of largeâ€amplitude, parallel, electrostatic waves associated with the Kelvinâ€Helmholtz instability by the magnetospheric multiscale mission. Geophysical Research Letters, 2016, 43, 8859-8866.              | 1.5 | 26        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 235 | Magnetospheric ion influence on magnetic reconnection at the duskside magnetopause. Geophysical Research Letters, 2016, 43, 1435-1442.   | 1.5 | 42        |
| 236 | Electron dynamics in a subprotonâ€gyroscale magnetic hole. Geophysical Research Letters, 2016, 43, 4112-4118.  | 1.5 | 49        |
| 237 | Observations of energetic particle escape at the magnetopause: Early results from the MMS Energetic Ion Spectrometer (EIS). Geophysical Research Letters, 2016, 43, 5960-5968.                                 | 1.5 | 23        |
| 238 | Transient, smallâ€scale fieldâ€aligned currents in the plasma sheet boundary layer during storm time substorms. Geophysical Research Letters, 2016, 43, 4841-4849.   | 1.5 | 30        |
| 239 | Kinetic evidence of magnetic reconnection due to Kelvinâ€Helmholtz waves. Geophysical Research Letters, 2016, 43, 5635-5643.   | 1.5 | 47        |
| 240 | Decay of mesoscale flux transfer events during quasiâ€continuous spatially extended reconnection at the magnetopause. Geophysical Research Letters, 2016, 43, 4755-4762.                                       | 1.5 | 28        |
| 241 | Magnetic reconnection and modification of the Hall physics due to cold ions at the magnetopause. Geophysical Research Letters, 2016, 43, 6705-6712.  | 1.5 | 45        |
| 242 | Steepening of waves at the duskside magnetopause. Geophysical Research Letters, 2016, 43, 7373-7380.   | 1.5 | 14        |
| 243 | The substructure of a flux transfer event observed by the MMS spacecraft. Geophysical Research Letters, 2016, 43, 9434-9443.   | 1.5 | 33        |
| 244 | MMS observations of electronâ€scale filamentary currents in the reconnection exhaust and near the X line. Geophysical Research Letters, 2016, 43, 6060-6069.   | 1.5 | 99        |
| 245 | ON ELECTRON-SCALE WHISTLER TURBULENCE IN THE SOLAR WIND. Astrophysical Journal Letters, 2016, 827, L8.   | 3.0 | 49        |
| 246 | Stable reconnection at the dusk flank magnetopause. Geophysical Research Letters, 2016, 43, 9374-9382.   | 1.5 | 7         |
| 247 | MMS observations of large guide field symmetric reconnection between colliding reconnection jets at the center of a magnetic flux rope at the magnetopause. Geophysical Research Letters, 2016, 43, 5536-5544. | 1.5 | 84        |
| 248 | MMS observations of ionâ€scale magnetic island in the magnetosheath turbulent plasma. Geophysical Research Letters, 2016, 43, 7850-7858.   | 1.5 | 53        |
| 249 | Multipoint MMS observations of fineâ€scale SAPS structure in the inner magnetosphere. Geophysical Research Letters, 2016, 43, 7294-7300.   | 1.5 | 10        |
| 250 | Inverse energy dispersion of energetic ions observed in the magnetosheath. Geophysical Research Letters, 2016, 43, 7338-7347.  | 1.5 | 5         |
| 251 | Observations of turbulence in a Kelvinâ€Helmholtz event on 8 September 2015 by the Magnetospheric Multiscale mission. Journal of Geophysical Research: Space Physics, 2016, 121, 11,021.                       | 0.8 | 81        |
| 252 | Force balance at the magnetopause determined with MMS: Application to flux transfer events. Geophysical Research Letters, 2016, 43, 11,941.  | 1.5 | 27        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 253 | Strong current sheet at a magnetosheath jet: Kinetic structure and electron acceleration. Journal of Geophysical Research: Space Physics, 2016, 121, 9608-9618.  | 0.8 | 20        |
| 254 | Magnetospheric Multiscale Mission observations and nonâ€force free modeling of a flux transfer event immersed in a superâ€Alfvà ©nic flow. Geophysical Research Letters, 2016, 43, 6070-6077.                              | 1.5 | 22        |
| 255 | Magnetospheric Multiscale observations of magnetic reconnection associated with Kelvinâ€Helmholtz waves. Geophysical Research Letters, 2016, 43, 5606-5615.  | 1.5 | 104       |
| 256 | Multispacecraft analysis of dipolarization fronts and associated whistler wave emissions using MMS data. Geophysical Research Letters, 2016, 43, 7279-7286.  | 1.5 | 49        |
| 257 | lon demagnetization in the magnetopause current layer observed by MMS. Geophysical Research Letters, 2016, 43, 4850-4857.  | 1.5 | 12        |
| 258 | A comparative study of dipolarization fronts at MMS and Cluster. Geophysical Research Letters, 2016, 43, 6012-6019.  | 1.5 | 37        |
| 259 | Energy limits of electron acceleration in the plasma sheet during substorms: A case study with the Magnetospheric Multiscale (MMS) mission. Geophysical Research Letters, 2016, 43, 7785-7794.                             | 1.5 | 51        |
| 260 | Cold ion demagnetization near the Xâ€line of magnetic reconnection. Geophysical Research Letters, 2016, 43, 6759-6767.   | 1.5 | 35        |
| 261 | Electron currents and heating in the ion diffusion region of asymmetric reconnection. Geophysical Research Letters, 2016, 43, 4691-4700.   | 1.5 | 53        |
| 262 | Whistler mode waves and Hall fields detected by MMS during a dayside magnetopause crossing. Geophysical Research Letters, 2016, 43, 5943-5952.   | 1.5 | 44        |
| 263 | Magnetospheric Multiscale Satellite Observations of Parallel Electron Acceleration in Magnetic Field Reconnection by Fermi Reflection from Time Domain Structures. Physical Review Letters, 2016, 116, 145101.             | 2.9 | 45        |
| 264 | Magnetospheric Multiscale Satellites Observations of Parallel Electric Fields Associated with Magnetic Reconnection. Physical Review Letters, 2016, 116, 235102.   | 2.9 | 61        |
| 265 | Magnetospheric Multiscale Observations of the Electron Diffusion Region of Large Guide Field Magnetic Reconnection. Physical Review Letters, 2016, 117, 015001.  | 2.9 | 74        |
| 266 | MMS Multipoint electric field observations of smallâ€scale magnetic holes. Geophysical Research Letters, 2016, 43, 5953-5959.  | 1.5 | 42        |
| 267 | Electron energization and mixing observed by MMS in the vicinity of an electron diffusion region during magnetopause reconnection. Geophysical Research Letters, 2016, 43, 6036-6043.                                      | 1.5 | 67        |
| 268 | Observations of whistler mode waves with nonlinear parallel electric fields near the dayside magnetic reconnection separatrix by the Magnetospheric Multiscale mission. Geophysical Research Letters, 2016, 43, 5909-5917. | 1.5 | 61        |
| 269 | Estimates of terms in Ohm's law during an encounter with an electron diffusion region. Geophysical Research Letters, 2016, 43, 5918-5925.  | 1.5 | 86        |
| 270 | Rippled Quasiperpendicular Shock Observed by the Magnetospheric Multiscale Spacecraft. Physical Review Letters, 2016, 117, 165101.   | 2.9 | 87        |

| #   | Article  | IF  | Citations |
|-----|--|-----|-----------|
| 271 | Dipolarization in the inner magnetosphere during a geomagnetic storm on 7 October 2015. Geophysical Research Letters, 2016, 43, 9397-9405.   | 1.5 | 7         |
| 272 | Microinjections observed by MMS FEEPS in the dusk to midnight region. Geophysical Research Letters, 2016, 43, 6078-6086.   | 1.5 | 13        |
| 273 | Spacecraft Observations and Analytic Theory of Crescent-Shaped Electron Distributions in Asymmetric Magnetic Reconnection. Physical Review Letters, 2016, 117, 185101.   | 2.9 | 42        |
| 274 | Signatures of complex magnetic topologies from multiple reconnection sites induced by Kelvinâ€Helmholtz instability. Journal of Geophysical Research: Space Physics, 2016, 121, 9926-9939.   | 0.8 | 35        |
| 275 | Reconnection guide field and quadrupolar structure observed by MMS on 16 October 2015 at 1307 UT. Journal of Geophysical Research: Space Physics, 2016, 121, 9880-9887.  | 0.8 | 10        |
| 276 | Shift of the magnetopause reconnection line to the winter hemisphere under southward IMF conditions: Geotail and MMS observations. Geophysical Research Letters, 2016, 43, 5581-5588.  | 1.5 | 17        |
| 277 | Finite gyroradius effects in the electron outflow of asymmetric magnetic reconnection. Geophysical Research Letters, 2016, 43, 6724-6733.  | 1.5 | 37        |
| 278 | The Electron Drift Instrument for MMS. Space Science Reviews, 2016, 199, 283-305.  | 3.7 | 52        |
| 279 | Magnetospheric Multiscale observations of largeâ€amplitude, parallel, electrostatic waves associated with magnetic reconnection at the magnetopause. Geophysical Research Letters, 2016, 43, 5626-5634.                              | 1.5 | 66        |
| 280 | Observation of highâ€frequency electrostatic waves in the vicinity of the reconnection ion diffusion region by the spacecraft of the Magnetospheric Multiscale (MMS) mission. Geophysical Research Letters, 2016, 43, 4808-4815.     | 1.5 | 32        |
| 281 | Motion of the MMS spacecraft relative to the magnetic reconnection structure observed on 16 October 2015 at 1307ÂUT. Geophysical Research Letters, 2016, 43, 5589-5596.  | 1.5 | 36        |
| 282 | A telescopic and microscopic examination of acceleration in the June 2015 geomagnetic storm: Magnetospheric Multiscale and Van Allen Probes study of substorm particle injection. Geophysical Research Letters, 2016, 43, 6051-6059. | 1.5 | 30        |
| 283 | The Search-Coil Magnetometer for MMS. Space Science Reviews, 2016, 199, 257-282.   | 3.7 | 212       |
| 284 | The Spin-Plane Double Probe Electric Field Instrument for MMS. Space Science Reviews, 2016, 199, 137-165.  | 3.7 | 543       |
| 285 | The Axial Double Probe and Fields Signal Processing for the MMS Mission. Space Science Reviews, 2016, 199, 167-188.  | 3.7 | 489       |
| 286 | The FIELDS Instrument Suite on MMS: Scientific Objectives, Measurements, and Data Products. Space Science Reviews, 2016, 199, 105-135.   | 3.7 | 390       |
| 287 | The Magnetospheric Multiscale Magnetometers. Space Science Reviews, 2016, 199, 189-256.  | 3.7 | 896       |
| 288 | Magnetospheric Multiscale Overview and Science Objectives. Space Science Reviews, 2016, 199, 5-21.   | 3.7 | 1,118     |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 289 | The Axial Double Probe and Fields Signal Processing for the MMS Mission. , 2016, 199, 167.  |     | 1         |
| 290 | The Spin-Plane Double Probe Electric Field Instrument for MMS. , 2016, 199, 137.  |     | 1         |
| 291 | The occurrence and wave properties of H <sup>+</sup> â€, He <sup>+</sup> â€, and O <sup>+</sup> â€band EMIC waves observed by the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2015, 120, 7477-7492. | 0.8 | 184       |
| 292 | Spatiotemporal evolution of electron characteristics in the electron diffusion region of magnetic reconnection: Implications for acceleration and heating. Geophysical Research Letters, 2015, 42, 2586-2593.             | 1.5 | 60        |
| 293 | Magnetic reconnection. Nature Physics, 2015, 11, 611-613.   | 6.5 | 4         |
| 294 | Highly structured electron anisotropy in collisionless reconnection exhausts. Geophysical Research Letters, 2014, 41, 5389-5395.  | 1.5 | 33        |
| 295 | A vortical dawn flank boundary layer for nearâ€radial IMF: Wind observations on 24 October 2001.<br>Journal of Geophysical Research: Space Physics, 2014, 119, 4572-4590.   | 0.8 | 13        |
| 296 | Structure of a reconnection layer poleward of the cusp: Extreme density asymmetry and a guide field. Journal of Geophysical Research: Space Physics, 2014, 119, 7343-7362.  | 0.8 | 9         |
| 297 | A statistical analysis of properties of small transients in the solar wind 2007–2009: STEREO and Wind observations. Journal of Geophysical Research: Space Physics, 2014, 119, 689-708.                                   | 0.8 | 51        |
| 298 | Interinstrument calibration using magnetic field data from the flux-gate magnetometer (FGM) and electron drift instrument (EDI) onboard Cluster. Geoscientific Instrumentation, Methods and Data Systems, 2014, 3, 1-11.  | 0.6 | 17        |
| 299 | Slow mode structure in the nightside magnetosheath related to IMF draping. Journal of Geophysical Research: Space Physics, 2014, 119, 1121-1128.  | 0.8 | 0         |
| 300 | Excitation of EMIC waves detected by the Van Allen Probes on 28 April 2013. Geophysical Research Letters, 2014, 41, 4101-4108.  | 1.5 | 55        |
| 301 | In situ observations of Pc1 pearl pulsations by the Van Allen Probes. Geophysical Research Letters, 2014, 41, 1823-1829.  | 1.5 | 28        |
| 302 | The Electric and Magnetic Field Instrument Suite and Integrated Science (EMFISIS) on RBSP. Space Science Reviews, 2013, 179, 127-181.   | 3.7 | 932       |
| 303 | Revision of empirical electric field modeling in the inner magnetosphere using Cluster data. Journal of Geophysical Research: Space Physics, 2013, 118, 4119-4134.  | 0.8 | 30        |
| 304 | In-plane electric fields in magnetic islands during collisionless magnetic reconnection. Physics of Plasmas, 2012, 19, 112902.  | 0.7 | 23        |
| 305 | Deep Solar Activity Minimum 2007 – 2009: Solar Wind Properties and Major Effects on the Terrestrial Magnetosphere. Solar Physics, 2012, 281, 461.   | 1.0 | 4         |
| 306 | Accelerated magnetosheath flows caused by IMF draping: Dependence on latitude. Geophysical Research Letters, 2012, 39, .  | 1.5 | 12        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 307 | "Crater―flux transfer events: Highroad to the X line?. Journal of Geophysical Research, 2011, 116, n/a-n/a.  | 3.3 | 16        |
| 308 | The inversion layer of electric fields and electron phase-space-hole structure during two-dimensional collisionless magnetic reconnection. Physics of Plasmas, 2011, 18, 012904.                 | 0.7 | 40        |
| 309 | Magnetosheath for almostâ€aligned solar wind magnetic field and flow vectors: Wind observations across the dawnside magnetosheath at X = â°¹12 Re. Journal of Geophysical Research, 2010, 115, . | 3.3 | 11        |
| 310 | On the multispacecraft determination of periodic surface wave phase speeds and wavelengths. Journal of Geophysical Research, 2010, 115, .  | 3.3 | 11        |
| 311 | Characteristics of storm time electric fields in the inner magnetosphere derived from Cluster data.<br>Journal of Geophysical Research, 2010, 115, .   | 3.3 | 5         |
| 312 | Plasma transport in the magnetotail lobes. Annales Geophysicae, 2009, 27, 3577-3590.   | 0.6 | 28        |
| 313 | Survey of cold ionospheric outflows in the magnetotail. Annales Geophysicae, 2009, 27, 3185-3201.  | 0.6 | 92        |
| 314 | Multispacecraft observations of the electron current sheet, neighboring magnetic islands, and electron acceleration during magnetotail reconnection. Physics of Plasmas, 2009, 16, .             | 0.7 | 57        |
| 315 | Earth's ionospheric outflow dominated by hidden cold plasma. Nature Geoscience, 2009, 2, 24-27.  | 5.4 | 97        |
| 316 | Reply to comment by H. Hasegawa on "Evolution of Kelvinâ€Helmholtz activity on the dusk flank magnetopause― Journal of Geophysical Research, 2009, 114, .  | 3.3 | 3         |
| 317 | Twoâ€stage oscillatory response of the magnetopause to a tangential discontinuity/vortex sheet followed by northward IMF: Cluster observations. Journal of Geophysical Research, 2008, 113, .    | 3.3 | 14        |
| 318 | Oscillation of electron counts at 500 eV downstream of the quasiâ€perpendicular bow shock. Journal of Geophysical Research, 2008, 113, .   | 3.3 | 2         |
| 319 | Evolution of Kelvinâ€Helmholtz activity on the dusk flank magnetopause. Journal of Geophysical Research, 2008, 113, .  | 3.3 | 95        |
| 320 | Evidence of an extended electron current sheet and its neighboring magnetic island during magnetotail reconnection. Journal of Geophysical Research, 2008, 113, .                                | 3.3 | 92        |
| 321 | Derivation of inner magnetospheric electric field (UNH-IMEF) model using Cluster data set. Annales<br>Geophysicae, 2008, 26, 2887-2898.  | 0.6 | 21        |
| 322 | Plasma convection in the magnetotail lobes: statistical results from Cluster EDI measurements. Annales Geophysicae, 2008, 26, 2371-2382.   | 0.6 | 31        |
| 323 | High-latitude plasma convection during Northward IMF as derived from in-situ magnetospheric Cluster EDI measurements. Annales Geophysicae, 2008, 26, 2685-2700.                                  | 0.6 | 27        |
| 324 | Cluster observations of broadband ULF waves near the dayside polar cap boundary: Two detailed multiâ€instrument event studies. Journal of Geophysical Research, 2007, 112, .                     | 3.3 | 5         |

| #   | Article  | IF  | Citations |
|-----|--|-----|-----------|
| 325 | High-latitude plasma convection from Cluster EDI measurements: method and IMF-dependence. Annales Geophysicae, 2007, 25, 239-253.  | 0.6 | 99        |
| 326 | High-latitude plasma convection from Cluster EDI: variances and solar wind correlations. Annales Geophysicae, 2007, 25, 1691-1707.   | 0.6 | 42        |
| 327 | Electric field measurements on Cluster: comparing the double-probe and electron drift techniques. Annales Geophysicae, 2006, 24, 275-289.  | 0.6 | 64        |
| 328 | IMF & amp; lt; i& amp; gt; B& amp; lt; sub& amp; gt; Y& amp; lt; /sub& amp; gt; & amp; lt; /i& amp; gt; and the seasonal dependences of the electric field in the inner magnetosphere. Annales Geophysicae, 2005, 23, 2671-2678. | 0.6 | 7         |
| 329 | New features of electron diffusion regions observed at subsolar magnetic field reconnection sites.<br>Geophysical Research Letters, 2005, 32, .  | 1.5 | 36        |
| 330 | Pc $1$ waves and associated unstable distributions of magnetospheric protons observed during a solar wind pressure pulse. Journal of Geophysical Research, 2005, $110$ , .   | 3.3 | 62        |
| 331 | A statistical investigation of dayside magnetosphere erosion showing saturation of response. Journal of Geophysical Research, 2005, $110$ , .  | 3.3 | 16        |
| 332 | Plasma convection across the polar cap, plasma mantle and cusp: Cluster EDI observations. Annales Geophysicae, 2004, 22, 2451-2461.  | 0.6 | 10        |
| 333 | Electromagnetic ion cyclotron waves in the subsolar region under normal dynamic pressure: Wind observations and theory. Journal of Geophysical Research, 2004, 109, .  | 3.3 | 6         |
| 334 | Temporal and spatial aspects of the cusp inferred from local and global ground- and space-based observations in a case study. Journal of Geophysical Research, 2004, 109, .  | 3.3 | 10        |
| 335 | Derivation of electric potential patterns in the inner magnetosphere from Cluster EDI data: Initial results. Journal of Geophysical Research, 2004, 109, .   | 3.3 | 24        |
| 336 | Tail lobe convection observed by Cluster/EDI. Journal of Geophysical Research, 2003, 108, .  | 3.3 | 12        |
| 337 | The geostationary field during dayside erosion events 1996–2001: A joint Wind, ACE, and GOES study. Journal of Geophysical Research, 2003, 108, .  | 3.3 | 7         |
| 338 | Electric field measurements in the inner magnetosphere by Cluster EDI. Journal of Geophysical Research, 2003, 108, .   | 3.3 | 26        |
| 339 | Coherence Lengths of the Interplanetary Electric Field: Solar Cycle Maximum Conditions. AIP Conference Proceedings, 2003, , .  | 0.3 | 1         |
| 340 | Wind-ACE solar wind correlations, 1999: An approach through spectral analysis. Journal of Geophysical Research, 2002, 107, SSH 7-1.  | 3.3 | 23        |
| 341 | Active spacecraft potential control for Cluster – implementation and first results. Annales Geophysicae, 2001, 19, 1289-1302.  | 0.6 | 100       |
| 342 | Viscous-type processes in the solar wind-magnetosphere interaction. Space Science Reviews, 2001, 95, 443-456.  | 3.7 | 45        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 343 | The Electron Drift Instrument on Cluster: overview of first results. Annales Geophysicae, 2001, 19, 1273-1288.                                       | 0.6 | 89        |
| 344 | Cluster EDI convection measurements across the high-latitude plasma sheet boundary at midnight. Annales Geophysicae, 2001, 19, 1669-1681.            | 0.6 | 24        |
| 345 | A uniform-twist magnetic flux rope in the solar wind. , 1999, , .  |     | 42        |
| 346 | EDI convection measurements at 5–6 R. Annales Geophysicae, 1999, 17, 1503.   | 0.6 | 1         |
| 347 | THE ELECTRON DRIFT INSTRUMENT FOR CLUSTER. Space Science Reviews, 1997, 79, 233-269.   | 3.7 | 72        |
| 348 | ACTIVE SPACECRAFT POTENTIAL CONTROL. Space Science Reviews, 1997, 79, 271-302.   | 3.7 | 41        |
| 349 | Observations of the lunar plasma wake from the WIND spacecraft on December 27, 1994. Geophysical Research Letters, 1996, 23, 1255-1258.              | 1.5 | 149       |
| 350 | WIND measurements of proton and alpha particle flow and number density. AIP Conference Proceedings, 1996, , .  | 0.3 | 0         |
| 351 | SWE, a comprehensive plasma instrument for the WIND spacecraft. Space Science Reviews, 1995, 71, 55-77.  | 3.7 | 1,059     |
| 352 | Observation of electromagnetic oxygen cyclotron waves in a flickering aurora. Geophysical Research Letters, 1995, 22, 2465-2468.                     | 1.5 | 31        |
| 353 | Electric fields derived from electron drift measurements. Geophysical Research Letters, 1994, 21, 1863-1866.   | 1.5 | 5         |
| 354 | Prompt ionization in the CRIT II barium releases. Geophysical Research Letters, 1992, 19, 973-976.   | 1.5 | 20        |
| 355 | Quasistatic electric field measurements with spherical double probes on the GEOS and ISEE satellites. Space Science Reviews, 1984, 37, 269.          | 3.7 | 133       |
| 356 | Ion acoustic wave forms generated by ionâ€ion streams at the Earth's bow shock. Geophysical Research Letters, 1982, 9, 207-210.                      | 1.5 | 35        |
| 357 | Kelvin-Helmholtz Vortices as an Interplay of Magnetosphere-Ionosphere Coupling. Frontiers in Astronomy and Space Sciences, 0, 9, .                   | 1.1 | 5         |
| 358 | Energetic electron microinjections observed by MMS in the dusk plasma sheet and drift resonance interpretation. Geophysical Research Letters, 0, , . | 1,5 | 0         |